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Signature Date

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of )  
Vincent T. Kozyski et al. ) Examiner: D. Watts  
for ROTARY CUTTER ) Group Art Unit: 3724  
Serial No.: 09/822,136 )  
Filed: 30 March 2001 ) Docket No. 6611-01

Hartford, Connecticut, 4 February 2004

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APPELLANT'S BRIEF TO THE BOARD OF PATENT APPEALS AND  
INTERFERENCES PURSUANT TO 37 C.F.R. §1.191

Dear Sirs:

This brief is in furtherance of the Notice of Appeal filed herewith.

I. REAL PARTY IN INTEREST:

The real party in interest is The Fletcher-Terry Company, of Farmington, Connecticut 06032.

II. RELATED APPEALS AND INTERFERENCES:

Appellants and the undersigned attorney are not aware of any other pending patent appeals or interferences that will directly affect, or be directly affected by, or have a bearing on, the Board's decision in the present appeal.

### III. STATUS OF CLAIMS:

A. Total Number of Claims in the Application: 30;

B. Status of All the Claims:

- 1) Claims cancelled: 2, 3, 7-12, and 14-24
- 2) Claims withdrawn from consideration but not cancelled: None
- 3) Claims pending: Claims 1, 4-6, 13, and 25-30
- 4) Claims allowed: None
- 5) Claims rejected: Claims 1, 4-6, 13, and 25-30
- 6) Claims objected to: None

C. Claims on Appeal: Claims 1, 4-6, 13, and 25-30.

### IV. STATUS OF AMENDMENTS:

All amendments filed have been entered. A Notice of Appeal is filed herewith.

### V. SUMMARY OF INVENTION:

Appellants provides below a brief description of each claim under appeal, and identify specific cites where support for that claim can be found within the specification. Support for each claim is not, however, limited to those specific cites and in most cases can be found in additional areas of the specification and claims.

Independent claim 1 of the present application claims a hand-held rotary cutter for cutting thin sheet materials that includes a handle having a hand grip portion, and a circular cutting blade having a cutting edge, a diameter, and a thickness. The cutting blade is pivotally mounted to the handle. The diameter of the cutting blade is not greater than fifteen times the thickness of the cutting blade.<sup>1</sup>

Claim 4, which depends from claim 1, further claims that the cutting edge includes an edge angle that is not less than forty-three degrees and not greater than forty-seven degrees.<sup>2</sup>

Claim 5, which depends from claim 4, further claims that the cutting edge includes an edge angle that is substantially equal to forty-five degrees.<sup>3</sup>

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<sup>1</sup> Support can be found in paragraphs 8, 14, and 15, and FIGS. 1-6.

<sup>2</sup> Support can be found in paragraphs 9 and 16.

<sup>3</sup> Support can be found in paragraphs 9 and 16.

Claim 6, which depends from claim 1, further claims that the diameter of the cutting blade is substantially equal to six times the thickness.<sup>4</sup>

Independent claim 13, claims a hand-held rotary cutter for cutting thin sheet materials that includes a handle having a hand grip portion, and a replaceable cutting blade and clip assembly. The cutting blade includes a thickness, a diameter not greater than fifteen times the thickness, and a cutting edge having an edge angle that is not less than 40 degrees and not greater than 50 degrees. The cutting blade is rotatably mounted on the clip. The cutting blade and clip assembly is attached to the handle and can be selectively replaced.<sup>5</sup>

Independent claim 25 claims a rotary cutter for cutting thin sheet materials that includes a handle having a hand grip portion, and a circular cutting blade having a cutting edge, a diameter, and a thickness. The cutting blade is pivotally mounted to the handle. The cutting edge includes an edge angle that is not less than forty degrees and not greater than fifty degrees.<sup>6</sup>

Claim 26, which depends from claim 25, further claims that the cutting edge includes an edge angle that is not less than forty-three degrees and not greater than forty-seven degrees.<sup>7</sup>

Claim 27, which depends from claim 26, further claims that the cutting edge includes an edge angle that is substantially equal to forty-five degrees.<sup>8</sup>

Independent claim 28 claims a rotary cutting blade for cutting thin sheet materials that includes a body having a diameter and a thickness, a cutting edge extending around the periphery of the body, and an axle aperture. The cutting edge includes an edge angle that is not less than forty degrees and not greater than fifty degrees. The axle aperture extends side to side through the thickness of the body. The diameter of the cutting blade is not greater than fifteen times the thickness.<sup>9</sup>

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<sup>4</sup> Support can be found in paragraph 15.

<sup>5</sup> Support can be found in paragraphs 8, 14, 15, and 17, and FIGS. 1-6.

<sup>6</sup> Support can be found in paragraphs 8, 9, and 14-16, and FIGS. 1-6.

<sup>7</sup> Support can be found in paragraphs 9 and 16.

<sup>8</sup> Support can be found in paragraphs 9 and 16.

<sup>9</sup> Support can be found in paragraphs 8, 9, and 14-16, and FIGS. 1-6.

Claim 29, which depends from claim 28, further claims that the cutting edge includes an edge angle that is not less than forty-three degrees and not greater than forty-seven degrees.<sup>10</sup>

Claim 30, which depends from claim 29, further claims that the cutting edge includes an edge angle that is substantially equal to forty-five degrees.<sup>11</sup>

VI. ISSUE:

1. Whether claims 1, 4-6, 13, and 25-30 are unpatentable under 35 U.S.C. §103(a) over United States Patent No. 704,352, issued to Mathein (hereinafter referred to as “Mathein”).
2. Whether claims 1, 4-6, 13, and 25-30 are unpatentable under 35 U.S.C. §103(a) over United States Patent No. 5,235,748 issued to Jahn (hereinafter referred to as “Jahn”).

VII. GROUPING OF CLAIMS:

With respect to the rejection of claims 1, 4-6, 13, and 25-30 as being unpatentable under 35 U.S.C. §103(a) over Mathein, claims 1, 4-6, 13, and 25-30 may stand or fall together.

With respect to the rejection of claims 1, 4-6, 13, and 25-30 as being unpatentable under 35 U.S.C. §103(a) over Jahn, claims 1, 4-6, 13, and 25-30 may stand or fall together.

VIII. ARGUMENT:

1. Claims 1, 4-6, 13, and 25-30 are rejected under 35 U.S.C. §103(a) as being unpatentable over Mathein.

Specifically, the Examiner indicates that:

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<sup>10</sup> Support can be found in paragraphs 9 and 16.

<sup>11</sup> Support can be found in paragraphs 9 and 16.

From an analysis of the drawing the diameter to thickness ratio of the blade is clearly less than 15 and the blade angle is approximately 68 degrees. The drawing may not be to scale but it is felt that the claimed ranges are at least close to those of the reference. Since there appears to be little effective difference in the specifics of the reference and the claimed ranges such ranges would have been obvious for one of ordinary skill in the art to specify.

Appellants respectfully disagree with the Examiner's suggestion and the rejection based thereon.

The Claimed Invention is Unobvious in View of Mathein:

Under the test set forth in *Graham v. John Deere Co. of Kansas City*, 148 USPQ 459 (1966) by the U.S. Supreme Court, there are four factual inquiries to be used in determining obviousness.<sup>12</sup> The first two inquiries involve: 1) determining the scope and contents of the prior art; and 2) ascertaining the differences between the prior art and the claims at issue.

Mathein discloses a "Revolving Trimmer for Photographic Prints" that includes a revolving cutter. The cutter rotates about a horizontal section of a spring axis. The spring axis can be rotated to permit release of the cutter from the spindle C. Mathein discloses that the motivation for the quick release mechanism is facilitate replacement of dull disks with sharp ones. In particular, Mathein discloses that "users of these implements, as well as the manufacturers and dealers, are subject to continual annoyance by reason of the necessity of getting extra parts". Hence, it is apparent that the cutter wheels contemplated by Mathein become dull and unusable in a very short period of time.

Other than the depiction of the cutter blade shown in FIG.4, there is no disclosure with Mathein regarding the edge angle of the cutter wheel. The prima facie case necessary to support the present rejection would have to establish that the teachings of Mathein disclose or suggest the edge angle limitations recited within claims 1, 4-6, 13, and 25-30; i.e., at least between 40 and 50 degrees. In the Office Action, the Examiner indicates that the blade angle is approximately 68°, which is well outside the claimed range.

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<sup>12</sup> See also MPEP §2141.

Applicants respectfully submit that the drawings within Mathein cannot be relied upon for scaled information. Section 2125 of the MPEP indicates that “PROPORTIONS OF FEATURES IN A DRAWING ARE NOT EVIDENCE OF ACTUAL PROPORTIONS WHEN DRAWINGS ARE NOT TO SCALE” and cites In re Wright as support. In In re Wright, the CCPA noted that the reference relied upon by the PTO contained no disclosure indicating that the drawings were to scale. The CCPA then stated that “[a]bsent any written description in the specification of quantitative values, arguments based on measurement of a drawing are of little value”.<sup>13</sup> The same situation exists in Mathein. There is nothing in Mathein indicating that the drawings are to scale. Hence, information scaled off of the drawing is of little value and cannot be relied upon to establish obviousness.

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The third inquiry under the *Graham* test requires that the level of ordinary skill in the art for the pertinent art be established. In the present case, the inventor Mr. Kozyrski has been employed by assignee The Fletcher-Terry Company for at least thirty (30) years. The Fletcher-Terry Company has been in the business of manufacturing glass cutting devices *since 1868*. Consequently, Mr. Kozyrski’s employment at the Fletcher-Terry Company qualify him as being a person of ordinary skill in the pertinent art. Appellants rebuttal of the Examiner’s suggestion of what would be obvious to one of ordinary skill in the pertinent art is therefore well grounded.

The fourth inquiry under the *Graham* test involves evaluating evidence of secondary considerations. Appellants have submitted clear evidence regarding the specific differences between the claimed device and cited reference (e.g., the edge angle of the cutter blade), and the significance of those differences. Those differences relate directly to the secondary considerations of *Graham*.

As stated above, the Examiner indicates that Mathein discloses a cutter wheel having an edge angle of approximately 68 degrees, and that there is little effective difference in the specifics of the reference and the claimed ranges and the claimed ranges would have been obvious for one of ordinary skill in the art.

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<sup>13</sup> In re Wright, 193 USPQ 332, 335 (CCPA 1977) citing In re Chitayat, 161 USPQ 224 (1969) as support.

Mr. Kozyrski's 9/6/2002 Declaration provides detailed information regarding the enhanced durability provided by the cutter blade geometry disclosed and claimed within the present application. Mr. Kozyrski's declaration of 9/24/2003 provides detailed information relating to the performance of rotary cutting blades, including some having an edge angle outside the claimed range and some with an edge angle within the claimed range. Both of these declarations introduce evidence of the significant advantages of the present claimed rotary cutter.

The assignee of the present invention has received numerous favorable marketing inquiries regarding the present rotary cutter. The favorable performance, safety, and durability of the present invention have been factors considered during those inquiries. Consequently, one of the identified differences between the claimed invention and the cited references is directly related to the likelihood of commercial success for the device. The fact that Mathein discloses an apparatus for facilitating the release of dull cutter wheels is illustrative of the difference between the two devices, particularly when the data establishing the substantial durability of the present device is considered.

In short, appellants respectfully submit that the rejection of claims 1, 4-6, 13, and 25-30 as being obvious in view of Mathein is without merit. In fact, appellants submit the opposite is true: the record clearly establishes that the claimed device is unobvious in view of the cited references. Accordingly, appellants respectfully request the Board reverse the rejection and allow claims 1, 4-6, 13, and 25-30.

2. Claims 1, 4-6, 13, and 25-30 are rejected under Jahn.

Specifically, the Examiner indicates:

It is noted that the cutter of the device has approximately a 60 degree angle and the diameter to thickness ratio is considerably less than 15. The drawings are not to scale here either so the rationale supporting the rejection is the same as in the preceding rejection.

Appellants respectfully disagree with the Examiner's suggestion and the rejection based thereon.

The Claimed Invention is Unobvious in View of Jahn:

Under the test set forth in *Graham v. John Deere Co. of Kansas City*, 148 USPQ 459 (1966) by the U.S. Supreme Court, there are four factual inquiries to be used in determining obviousness.<sup>14</sup> The first two inquiries involve: 1) determining the scope and contents of the prior art; and 2) ascertaining the differences between the prior art and the claims at issue.

Jahn discloses a seal cutter that includes a stationary jaw member, a cutter wheel 16, and a movable jaw member 18. The cutting wheel 16 is generally circular in shape, has a sharp cutting edge 66, and is rotatably mounted on a retaining pin 64. Jahn discloses that the seal of a bottle (e.g., a wine bottle) may be inserted between the jaws and cut by the device.

Other than the depiction of the cutter wheel shown in FIG.14, there is no disclosure with Jahn regarding the edge angle of the cutter wheel. The prima facie case necessary to support the present rejection would have to establish that the teachings of Jahn disclose or suggest the edge angle limitations recited within claims 1, 4-6, 13, and 25-30; i.e., at least between 40 and 50 degrees. In the Office Action, the Examiner indicates that the blade angle is approximately 60°, which is well outside the claimed range.

Applicants respectfully submit that the drawings within Jahn cannot be relied upon for scaled information. Section 2125 of the MPEP indicates that “PROPORTIONS OF FEATURES IN A DRAWING ARE NOT EVIDENCE OF ACTUAL PROPORTIONS WHEN DRAWINGS ARE NOT TO SCALE” and cites *In re Wright* as support. In *In re Wright*, the CCPA noted that the reference relied upon by the PTO contained no disclosure indicating that the drawings were to scale. The CCPA then stated that “[a]bsent any written description in the specification of quantitative values, arguments based on measurement of a drawing are of little value”.<sup>15</sup> The same situation exists in Jahn. There is nothing in Jahn indicating that the drawings are to scale. Hence, information scaled off of the drawing is of little value and cannot be relied upon to establish obviousness.

The third inquiry under the *Graham* test requires that the level of ordinary skill in the art for the pertinent art be established. As indicated above, the inventor Mr. Kozyrski

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<sup>14</sup> See also MPEP §2141.

<sup>15</sup> *In re Wright*, 193 USPQ 332, 335 (CCPA 1977) citing *In re Chitayat*, 161 USPQ 224 (1969) as support.



has been employed by assignee The Fletcher-Terry Company for at least thirty (30) years. The Fletcher-Terry Company has been in the business of manufacturing glass cutting devices *since 1868*. Consequently, Mr. Kozyrski's employment at the Fletcher-Terry Company qualify him as being a person of ordinary skill in the pertinent art. Appellants rebuttal of the Examiner's suggestion of what would be obvious to one of ordinary skill in the pertinent art is therefore well grounded.

The fourth inquiry under the *Graham* test involves evaluating evidence of secondary considerations. Appellants have submitted clear evidence regarding the specific differences between the claimed device and cited reference (e.g., the edge angle of the cutter blade), and the significance of those differences. Those differences relate directly to the secondary considerations of *Graham*.

As stated above, the Examiner indicates that Jahn discloses a cutter wheel having an edge angle of approximately 60 degrees, and that there is little effective difference in the specifics of the reference and the claimed ranges and the claimed ranges would have been obvious for one of ordinary skill in the art (based on the Examiner's statement that the rationale for the Jahn rejection is the same as that provided in the Mathein rejection).

Mr. Kozyrski's 9/6/2002 Declaration provides detailed information regarding the enhanced durability provided by the cutter blade geometry disclosed and claimed within the present application. Mr. Kozyrski's declaration of 9/24/2003 provides detailed information relating to the performance of rotary cutting blades, including some having an edge angle outside the claimed range and some with an edge angle within the claimed range. Both of these declarations introduce evidence of the significant advantages of the present claimed rotary cutter.

The assignee of the present invention has received numerous favorable marketing inquiries regarding the present rotary cutter. The favorable performance, safety, and durability of the present invention have been factors considered during those inquiries. Consequently, one of the identified differences between the claimed invention and the cited references is directly related to the likelihood of commercial success for the device.

In short, appellants respectfully submit that the rejection of claims 1, 4-6, 13, and 25-30 as being obvious in view of Jahn is without merit. In fact, appellants submit the opposite is true: the record clearly establishes that the claimed device is unobvious in

view of the cited references. Accordingly, appellants respectfully request the Board reverse the rejection and allow claims 1, 4-6, 13, and 25-30.

In view of the above, Appellants respectfully requests the Board of Patent Appeals and Interferences reverse the rejections in the present case and allow this case to pass onto issuance.

Regarding the fees for the Notice of Appeal filed herewith and the present Appeal Brief, appellants refer to MPEP §1208.03 "Reopening of Prosecution After Appeal" which provides:

Whether appellant elects to continue prosecution or to request reinstatement of the appeal, if prosecution was reopened prior to a decision on the merits by the Board of Patent Appeals and Interferences, the fee paid for the notice of appeal, appeal brief, and request for oral hearing (if applicable) will be applied to a later appeal on the same application.

In the present application, appellants filed a Notice of Appeal and an Appeal Brief on 12/31/04 appealing the final rejection of the Examiner. In response to appellants appeal, but before the appeal was considered by the Board, the Examiner withdrew the final rejection and issued new grounds of rejection. Hence, the present situation is on point with the scenario described within MPEP §1208.03. Consequently, appellants do not believe any fees are due in the present application.

In the event any fee is due with this filing, however, appellants authorize that fee be charged to our Deposit Account No. 13-0235 and ask that the undersigned attorney be telephoned so that an explanation of the charges can be provided.

Respectfully submitted,

By Richard D. Getz  
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IX. APPENDIX:

The claims involved in the present appeal are as follows:

1. (Previously Amended) A hand-held rotary cutter for cutting thin sheet materials, comprising:

a handle having a hand grip portion; and

a circular cutting blade having a cutting edge, a diameter, and a thickness, wherein the cutting blade is pivotally mounted to the handle, and the cutting edge includes an edge angle that is not less than forty degrees and not greater than fifty degrees;

wherein the diameter of the cutting blade is not greater than fifteen times the thickness.

4. (Previously Amended) The hand-held rotary cutter of claim 1, wherein the cutting edge includes an edge angle that is not less than forty-three degrees and not greater than forty-seven degrees.

5. (Original) The hand-held rotary cutter of claim 4, wherein the cutting edge includes an edge angle that is substantially equal to forty-five degrees.

6. (Original) The hand-held rotary cutter of claim 1 wherein the diameter of the cutting blade is substantially equal to six times the thickness.

13. (Previously Amended) A hand-held rotary cutter for cutting thin sheet materials, comprising:

a handle having a hand grip portion; and

a replaceable cutting blade and clip assembly, wherein the cutting blade includes a thickness, a diameter not greater than fifteen times the thickness, and a cutting edge having an edge angle that is not less than forty degrees and not greater than fifty degrees, and the cutting blade is rotatably mounted on the clip;

wherein the cutting blade and clip assembly is attached to the handle and can be selectively replaced.

25. (Previously Added) A rotary cutter for cutting thin sheet materials, comprising:  
a handle having a hand grip portion; and  
a circular cutting blade having a cutting edge, a diameter, and a thickness, wherein the cutting blade is pivotally mounted to the handle;  
wherein the cutting edge includes an edge angle that is not less than forty degrees and not greater than fifty degrees.
26. (Previously Added) The rotary cutter of claim 25, wherein the cutting edge includes an edge angle that is not less than forty-three degrees and not greater than forty-seven degrees.
27. (Previously Added) The rotary cutter of claim 26, wherein the cutting edge includes an edge angle that is substantially equal to forty-five degrees.
28. (Previously Added) A rotary cutting blade for cutting thin sheet materials, comprising:  
a body having a diameter and a thickness;  
a cutting edge extending around the periphery of the body, the cutting edge includes an edge angle that is not less than forty degrees and not greater than fifty degrees;  
an axle aperture that extends side to side through the thickness of the body;  
wherein the diameter of the cutting blade is not greater than fifteen times the thickness.
29. (Previously Added) The cutting blade of claim 28, wherein the cutting edge includes an edge angle that is not less than forty-three degrees and not greater than forty-seven degrees.
30. (Previously Added) The cutting blade of claim 29, wherein the cutting edge includes an edge angle that is substantially equal to forty-five degrees.